

# State of Connecticut Department of Public Health



CONNECTICUT DEPARTMENT OF  
PUBLIC HEALTH

Keeping Connecticut Healthy

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Commissioner Joxel Garcia, M.D., M.B.A.



Oral Health  
Program to  
Engage  
Non-Dental Health  
& Human Service

Workers in  
Integrated  
Dental  
Education

# ORAL HEALTH IN EARLY CHILDHOOD

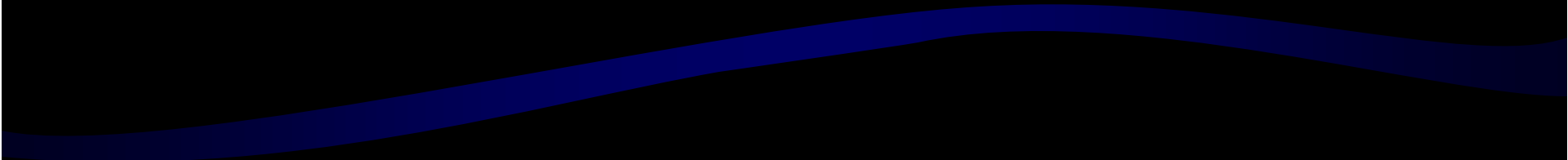


**Training Curriculum & Guidelines  
for Non-Dental Health & Human Services Providers**

# LEARNING OBJECTIVES

By the end of this presentation you will:

- Recognize the oral disease called “Early Childhood Caries” and its impact on general health and well-being
- Recognize how teeth develop decay
- List ways to help prevent dental decay
- Describe how to screen for decay and other dental diseases and conditions
- Describe when to refer to the dentist



# EARLY CHILDHOOD CARIES: IMPACT ON HEALTH AND WELL-BEING

# EARLY CHILDHOOD CARIES (ECC)

- A severe **rapidly** developing form of tooth decay in infants and young children
- Affects teeth that erupt first, at about **6 months**, and are least protected by saliva
- Formerly called:
  - Baby Bottle Tooth Decay
  - Nursing Caries





# SEVERE ECC LEADS TO...

- Extreme Pain
- Spread of Infection
- Difficulty chewing, poor nutrition, below average weight



- Extensive and costly dental treatment

- High risk of dental decay and crooked bite in adult teeth



# SEVERE ECC LEADS TO...

- Poor self-esteem, behavioral and social interaction problems
- Speech development problems
- Lost school days and difficulty learning

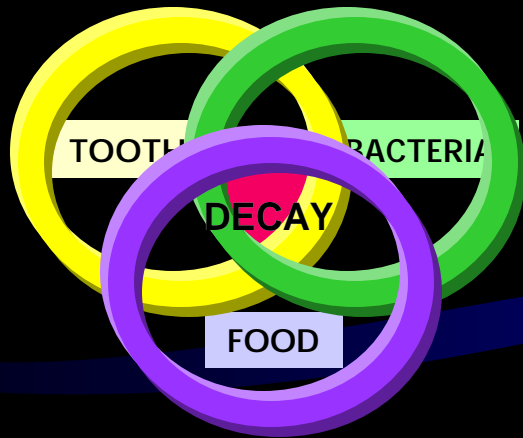




# PREVALENCE OF DENTAL DECAY

- Dental decay is the most common chronic disease of childhood
  - 6% of 1 year olds
  - 22% of 2 year olds
  - 35% of 3 year olds
  - 48% of 4 year olds

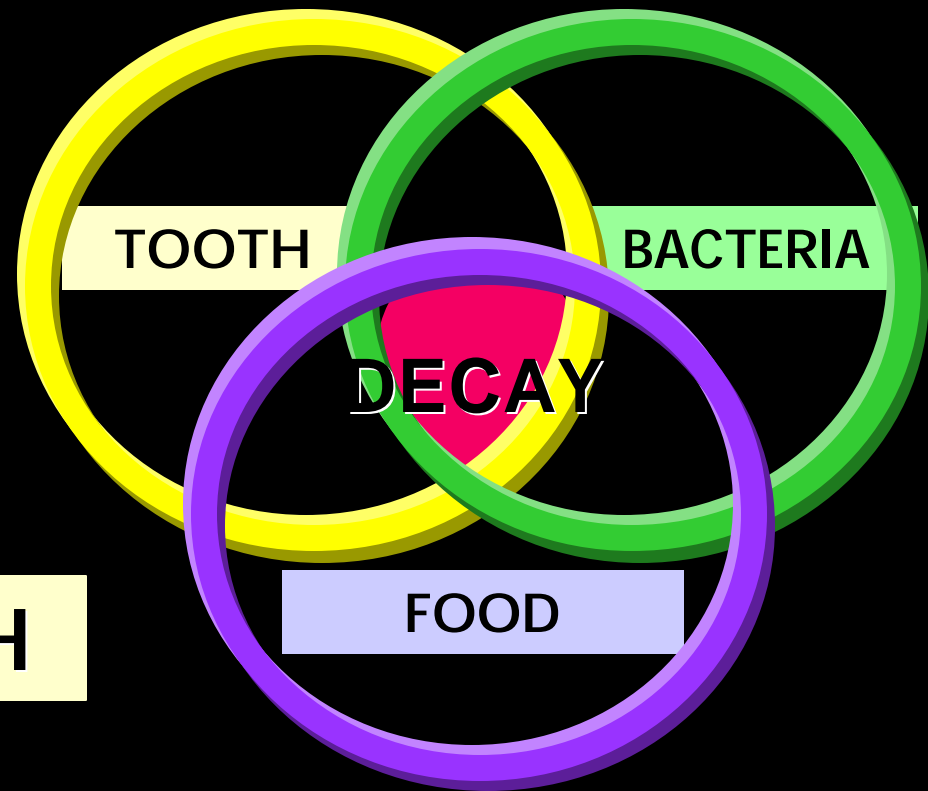




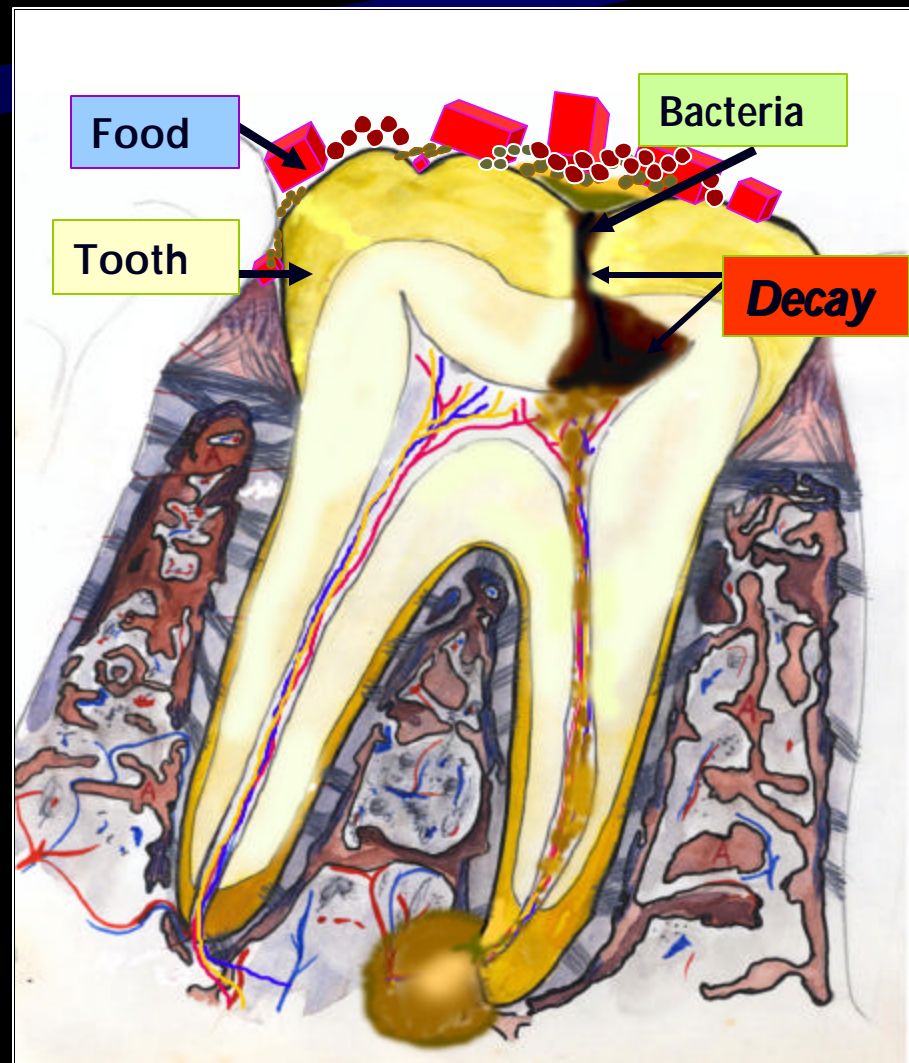
# HOW TEETH DEVELOP DECAY

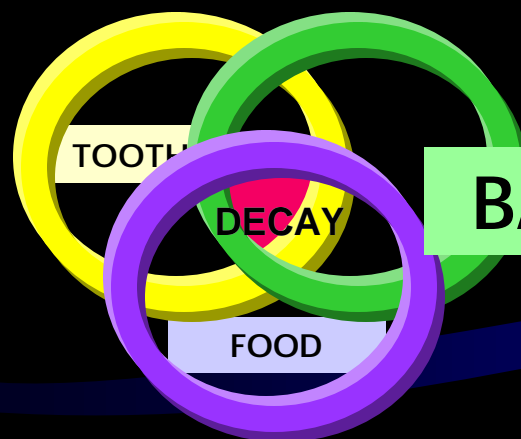
# HOW TEETH DEVELOP DECAY

**BACTERIA**  
break down  
**FOOD**  
into acids that  
eat away the **TOOTH**



**BACTERIA + FOOD + TOOTH = DECAY**





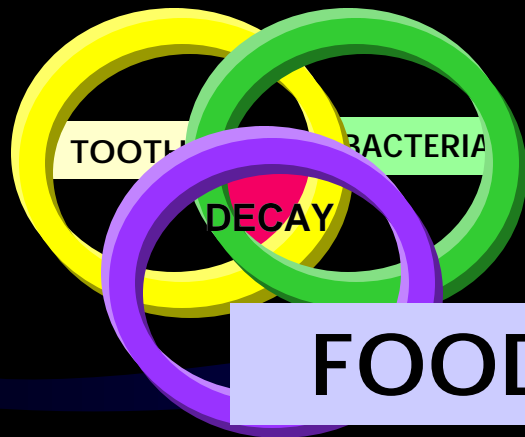
**BACTERIA**

# DENTAL DECAY IS AN INFECTIOUS TRANSMITTABLE DISEASE

- Bacteria transmitted from mother
- Mothers with high levels of bacteria have:
  - High levels of decay
  - Poor oral hygiene
  - High frequency of sugar intake





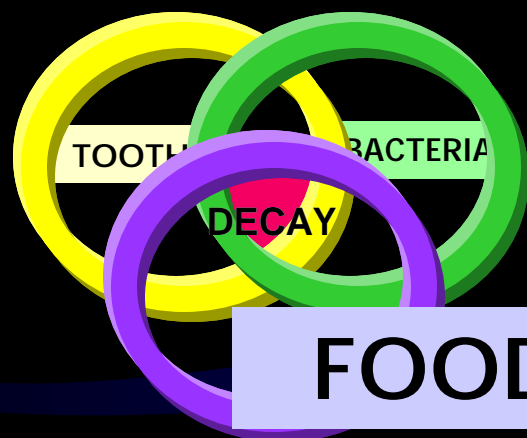


# AVOID SUGARS



- No sweetened contents in the bottle
- No sweetened contents in the “sippy” cup
- Beware of sweetened pacifiers

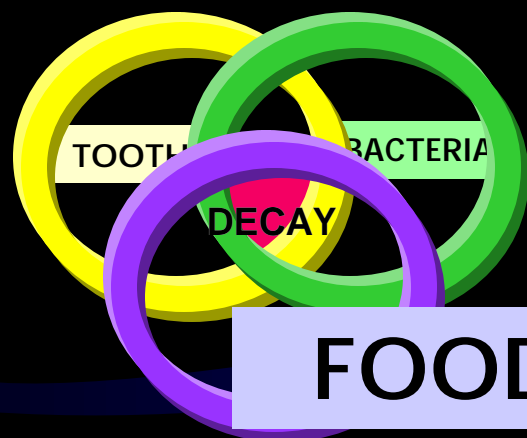




# CHECK FOOD LABELS



You'd be surprised how much sugar is in some foods!

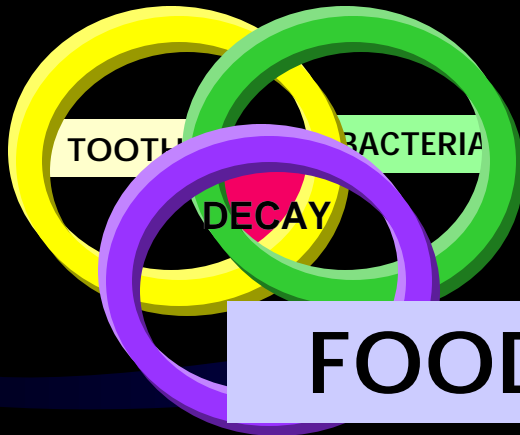


# NOT JUST WHAT YOU EAT BUT HOW OFTEN

## *AVOID*

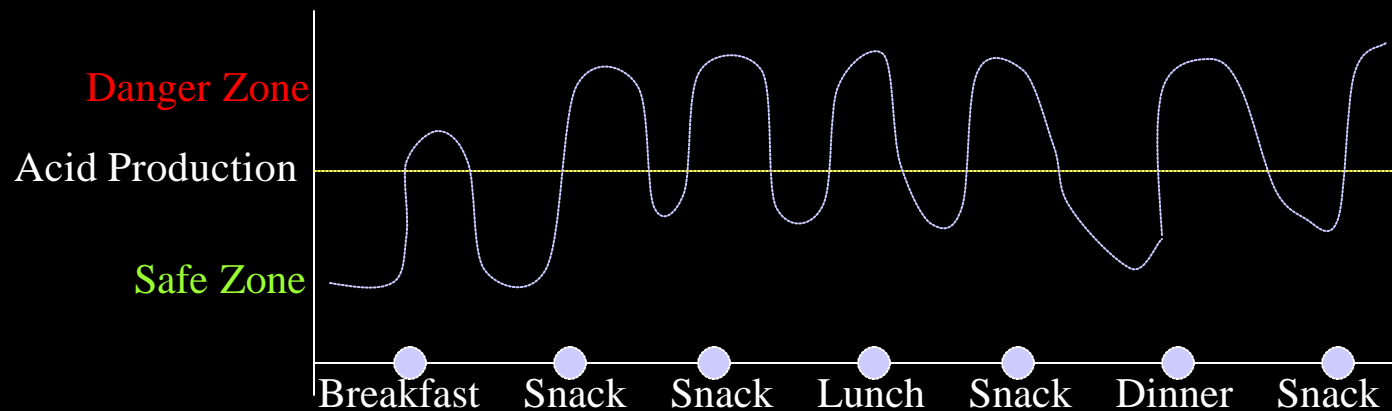
- Bottle at bedtime
- Bottle as pacifier
- *Ad lib* feeding



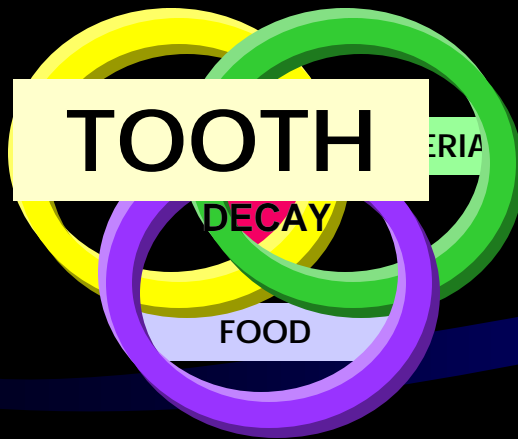


# NOT JUST WHAT YOU EAT BUT HOW OFTEN

- Frequency of sugar ingestion is more important than quantity
- Acids produced by bacteria after sugar intake persist for 20-40 minutes







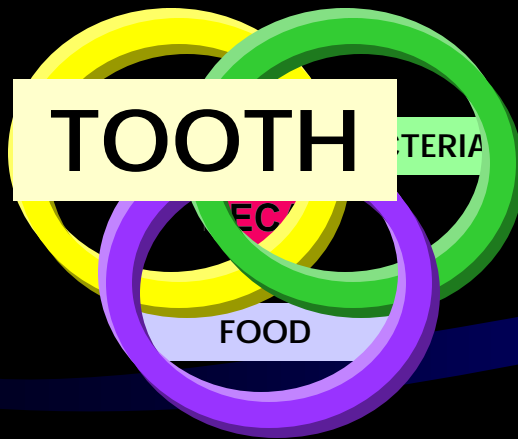
# DECAY CAN BEGIN AS SOON AS THE TOOTH COMES INTO THE MOUTH

Early Childhood Caries usually affects:

- First the upper incisors
- Then 1<sup>st</sup> baby molars
- Then 2<sup>nd</sup> baby molars



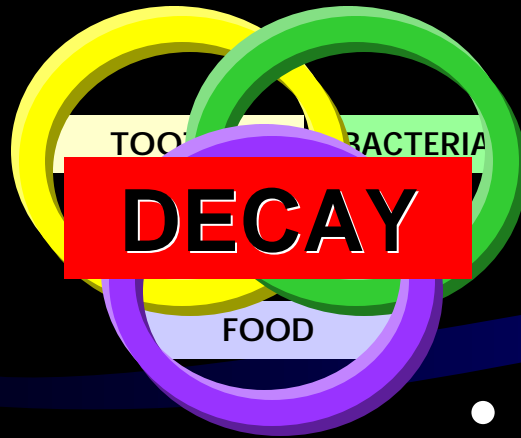




# RISK FOR DECAY INCREASED IN TEETH WITH DEVELOPMENTAL DEFECTS

- 20% of CT Head Start children have defects in upper incisors
- More tooth defects in
  - premature infants
  - lower income groups
  - certain minority groups

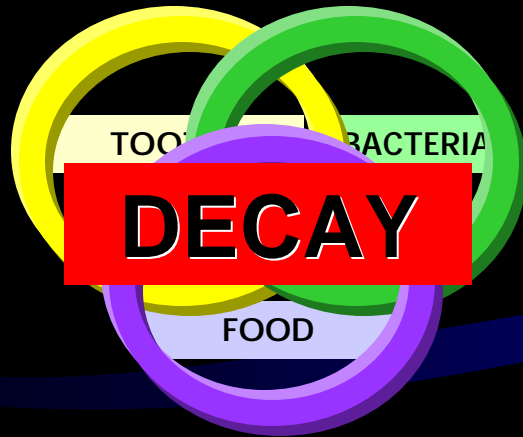




## RISK FOR DECAY INCREASED

- Low socio-economic status
- Low education level
- Minority race / ethnicity
- Poor access to health care
- Special health care needs
- Inadequate fluoride
- Poor oral hygiene

80% of dental decay occurs in 20% of children



# RISK FOR DECAY INCREASED

With certain health beliefs

- “Decay will happen anyway”
- “Baby teeth are not important”
- “It is cruel to deny children the bottle”
- “The bottle or snacks keep my baby quiet”





# HELP PREVENT DENTAL DECAY

# INFANT FEEDING

- Breast feeding is best
- Always hold the infant when bottle feeding
- No propping of bottle
- Only formula or breast milk in bottle
- From breast to cup





# INFANT FEEDING

## Bed time bottle alternatives



### *Good Tip*

If child (or “*caregiver*”) is having a lot of trouble giving up the bottle filled with juice or milk, try to...

- ✓ Slowly replace juice or milk with water, adding a little more water to the juice or milk each time
- ✓ Eventually, the child should become used to a bottle with only water

# INFANT FEEDING

## Bed time bottle alternatives

- Stuffed toy
- Blanket
- Clean pacifier
- Rocking
- Back rub
- Read or sing to child
- Crying is normal

( Baby will sleep peacefully after a few nights )



# TODDLER FEEDING

## Liquids

- Ideally, **sugar-free** drinks
- Milk or water between meals
- No drinking *ad lib* from “sippy” cup



- Sugars in fruit juice cause cavities
- **Limit fruit juice** to meal times

# TODDLER FEEDING

## Solid foods

Limit number of times eating and snacking

- Regular meals, no “*grazing*”
- Sugar-free snacks

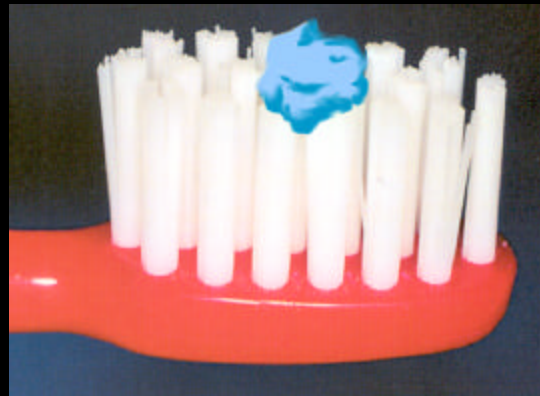


# ORAL HYGIENE

Start brushing

When first tooth comes into the mouth

- Clean with soft nylon brush and small “*pearl*” of toothpaste with fluoride
- Adult supervision
- Spit out toothpaste ( Don't rinse )
- Nothing to eat or drink after brushing at night
- Nighttime is most important time to brush





# ORAL HYGIENE

## Proper brushing technique for infant or toddler

- Infant sits or lies in adult's lap, both facing in same direction
- Toddler sits or stands in front of adult, both facing mirror



# ORAL HYGIENE

## Proper brushing technique

- Lift lip to brush gum line

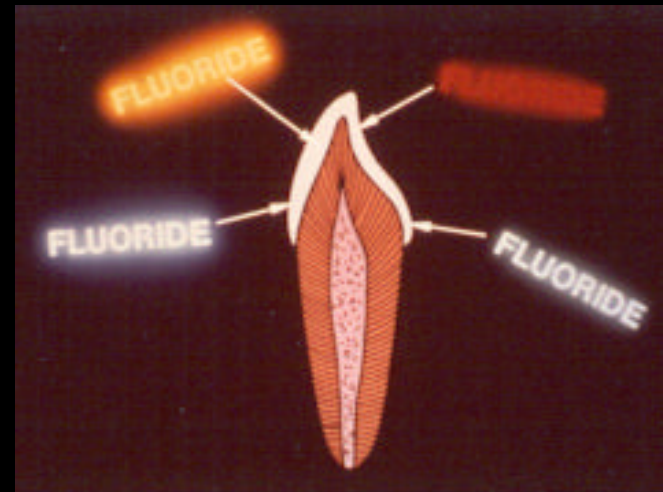


- Brush behind teeth

# FLUORIDE

Children at risk for decay should receive fluoride

- By drinking fluoridated water
- - Or - by taking supplements
- Supplements should begin at 6 months if needed
- Larger CT municipal water supplies are fluoridated
- Smaller water supplies and wells should be tested
- Water filters, bottled water, and other bottled drinks may have little or no fluoride



# FLUORIDE

## TOO MUCH FLUORIDE

Can cause fluorosis



# FIRST DENTAL VISIT

Ideally, first dental visit by **first birthday**

## Old Approach

- Dental decay will happen
- Treat the decay and then start a preventive program

## New Approach

- Early intervention to provide examination, risk assessment, and guidance to prevent disease





# DENTAL SCREENING



# HOW TO SCREEN FOR DENTAL DECAY

For infant or toddler

- Position child in caregiver's lap facing caregiver
- Sit with knees touching knees of caregiver
- Lower the child's head onto your lap
- Mouth will automatically open



# WHAT TO LOOK FOR

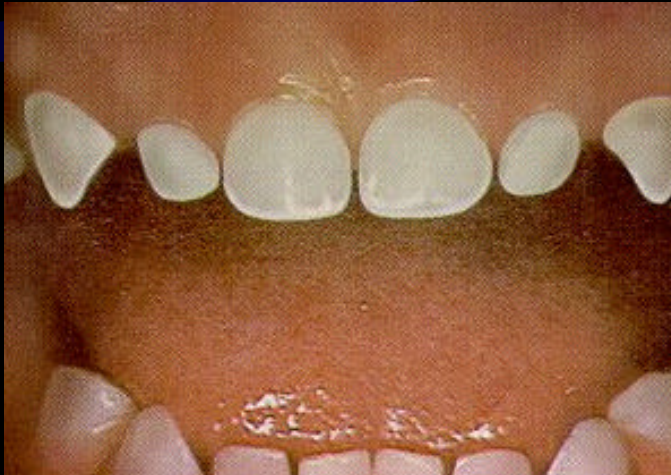
In early childhood, focus on

- Oral hygiene status
- Presence of dental decay
- Presence of tooth defects



# WHAT TO LOOK FOR

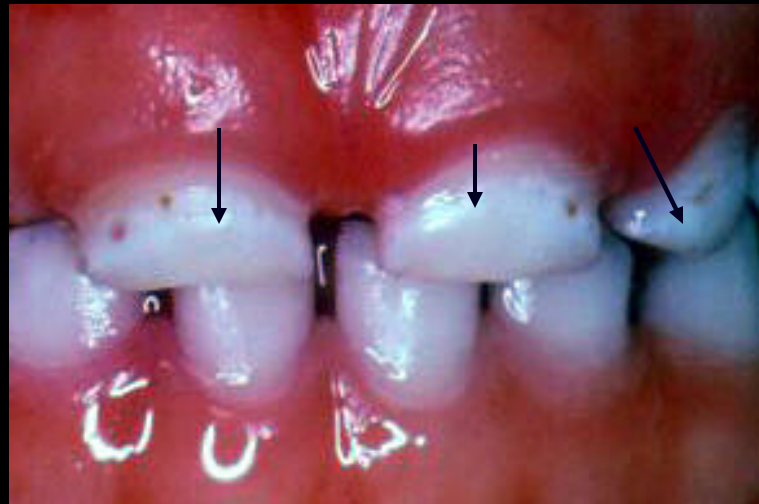
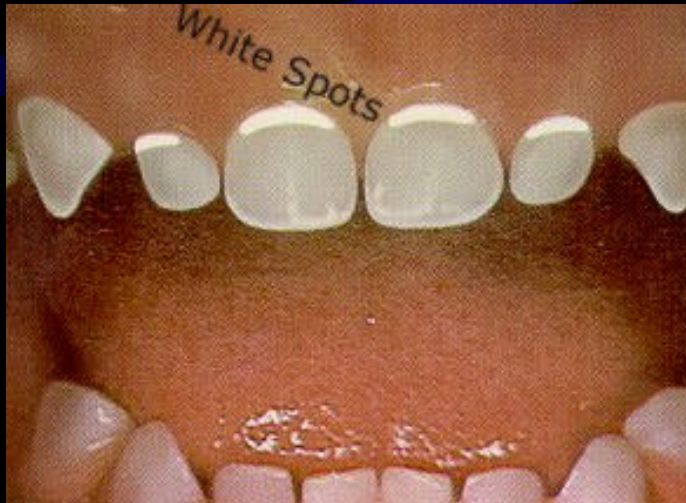
Check for normal healthy teeth





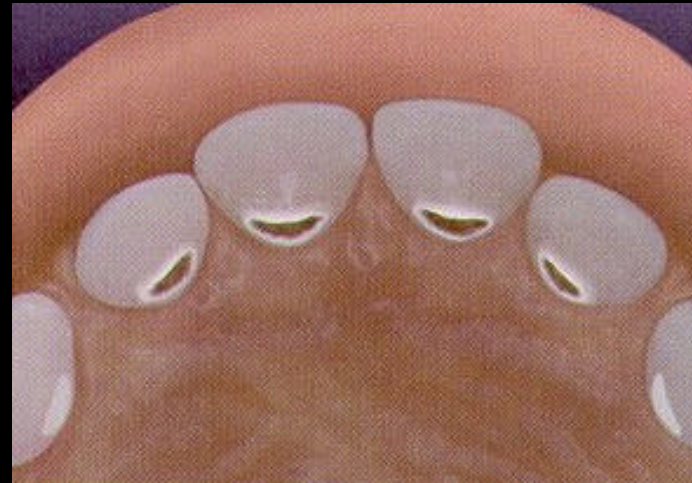
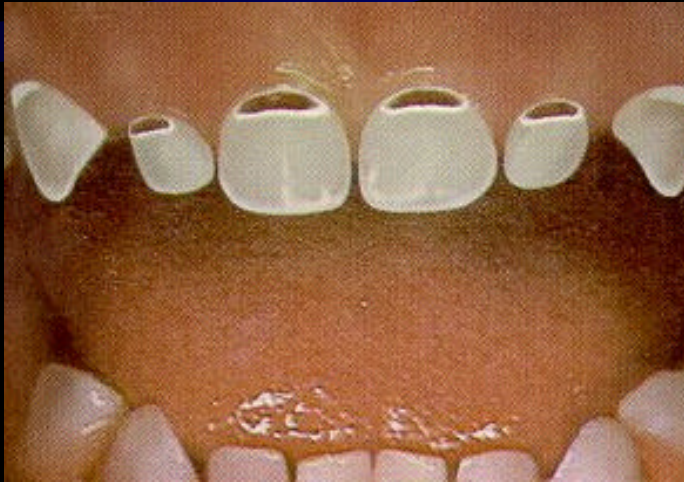
# WHAT TO LOOK FOR

Check for early signs of ECC: white spots



# WHAT TO LOOK FOR

Check for later signs of ECC: **brown** areas





# WHAT TO LOOK FOR

Check for advanced **severe** ECC

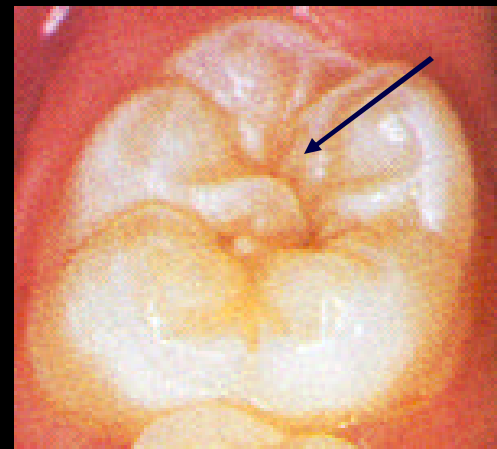




# WHAT TO LOOK FOR

Check for presence of tooth defects

A risk for decay



# DOCUMENT FINDINGS AND FOLLOW-UP



Keeping Connecticut Healthy

**1. Dental Findings:** **DOB** \_\_\_\_\_ **Date:** \_\_\_\_/\_\_\_\_/\_\_\_\_  
0 = not present 1 = present

\_\_\_\_decay \_\_\_\_tooth defects \_\_\_\_fillings \_\_\_\_sealants

\_\_\_\_risk factors for dental decay (list):

\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_history of severe mouth pain or infection past 2 years

**2. Dentist of record?** ☐ Yes ☐ No

Dentist's name \_\_\_\_\_ phone \_\_\_\_\_

Last visit to dentist \_\_\_\_/\_\_\_\_/\_\_\_\_

**3. Need for Dental Care: 0 1 2** (circle one)

0 = no problems, routine care 1 = early need for care

2 = urgent / emergency need for care

Referred to \_\_\_\_\_ date \_\_\_\_\_

# ANTICIPATORY GUIDANCE



Providing counseling or intervention that  
helps prevent and /or reduce diseases,  
disorders and their impact

# ANTICIPATORY GUIDANCE

## 0-6 months

- Assess and counsel with regard to proper **feeding**
- Assess need for **fluoride** supplements
- Assess and counsel with regard to **risk** for dental decay
- Do a **screening** for decay and other dental diseases and conditions
- Help identify a “**dental home**”

# ANTICIPATORY GUIDANCE

## 7 months and older

- Assess and counsel with regard to proper **feeding**
- Assess need for and prescribe **fluoride** supplements
- Provide oral **hygiene** instructions
- Ensure regular **dental visits** from age one year
- Assess and counsel with regard to **risk** for dental decay
- Do a **screening** for decay and other dental diseases and conditions

# TAKE HOME MESSAGES

- Teeth, including baby teeth, are essential for good general health and proper development
- Dental decay in early childhood is a serious infectious disease
- Decay develops in the presence of teeth, bacteria and sugars
- Dental decay in early childhood is entirely preventable
- First dental visit by first birthday



# TAKE HOME MESSAGES

## What **YOU** can do

1. Raise awareness, educate, **promote** oral health
2. Do a **risk assessment** for dental disease
3. Check the **mouth** at every well child visit
4. Provide appropriate **prevention** interventions  
**target:** feeding practices, hygiene, fluoride
5. **Document** findings and follow-up

For more information contact:

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